

REMARKS

The non-final Office Action mailed November 19, 2003 has been reviewed and carefully considered. Claims 1, 3, 4, 5, 9, 13, 14, 15, 17, 18, 19, 23, 27, 28, 29 and 30 have been amended. Claims 1-30 are pending in the application.

In paragraph 2 on page 2 of the Office Action, the oath or declaration was indicated as being defective.

Applicants have included a supplemental oath or declaration in accordance with the requirements of 37 C.F.R. 1.67(a).

In paragraph 3 on page 2 of the Office Action, Figures 1 and 2 were objected to due to certain informalities.

Applicants respectfully traverse the objection. However, in accordance with Examiner's suggestion, replacement sheets 1 and 2 have been included.

At paragraph 5 on page 3 of the Office Action, claims 1, 3, 4, 5, 9, 13, 14, 15, 17, 18, 19, 23, 27, 28, 29 and 30 were objected to due to certain informalities.

Applicants respectfully traverse the objections. However, in accordance with Examiner's suggestions, Applicants have amended claims 1, 3, 4, 5, 9, 13, 14, 15, 17, 18, 19, 23, 27, 28, 29 and 30.

At paragraph 7 on page 5 of the Office Action, claims 1-3, 12-17, and 26-30 were rejected under 35 U.S.C. § 102(b) over DeKoning et al. (Patent No. 5,588,110).

At paragraph 8 on page 7 of the Office Action, claims 1-6, 15-20, and 29-30 under 35 U.S.C. § 102(e) over Skazinski et al. (Patent No. 6,574,709).

At paragraph 10 on page 9 of the Office Action, claims 7-11 and 21-25 were rejected under 35 U.S.C. § 103(a) over DeKoning et al. in view Skazinski et al. (Patent No. 6,247,099).

Applicants respectfully traverse the §§ 102(b), (e) and 103(a) rejections. To establish a *prima facie* case for rejection under 35 U.S.C. § 102, all the claim limitations must be taught, disclosed or suggested by the cited reference. To establish a *prima facie* case for rejection under 35 U.S.C. § 103(a), all the claim limitations must be taught or suggested by the cited prior art references, *see* M.P.E.P § 2143.01. In this instance, the requirements are not present and a *prima facie* rejection fails under 35 U.S.C. §§ 102(b) and 103(a) because the Office Action fails to cite

a reference or references that teach, disclose or suggest all the claim limitations of Applicants' application.

The instant application focuses on maintaining cache coherency in a system having first and second controllers. As recited in the claims, the present invention requires at least "selecting a mirror cache line in a second controller to copy data into, mirroring the data from a cache line in a first controller to the mirror cache line in the second controller, and sending a message from the first controller to the second controller informing the second controller of cache meta data associated with data in the mirror cache line." Thus, once data is mirrored to a second controller, the second controller is informed of the meta data associated with the mirrored cache line.

In contrast, DeKoning describes a method for transferring data between two devices that insures data recovery in the event of a fault. DeKoning includes "controller 18 that sets up auxiliary data structures within the primary cache memory area 34 referred to as recovery control blocks (RCBs)." Column 5, lines 45-47. DeKoning further states at column 5, lines 49-54, "when the controller 18 mirrors one or more cache blocks containing write request data to the alternate cache memory area 42, the associated RCB(s) 44 will first be mirrored into an alternate controller recovery control block(s) (RCB) 45." The RCBs are first mirrored to an alternate controller before data is mirrored to an alternate cache memory area. Because RCBs are sent to alternate controllers before mirroring data, information associated with the data in the mirror cache line is not yet available. DeKoning does not teach, disclose or suggest at least "sending a message from the first controller to the second controller informing the second controller of cache meta data associated with data in the mirror cache line."

Skazinski ('709) also fails to disclose, teach or suggest Applicants' invention as recited in the claims. Rather, Skazinski ('709), at column 22, lines 61-66 states, "if the data in this cache line has not been written, by the controller, to the system drive (step 445) a header, such as, for example, mirror header 7000 (see Table 7), is prepared with information that will facilitate the mirroring of the data by an alternate controller."

Thus, rather than "mirroring the data from a cache line in a first controller to the mirror cache line in the second controller, and sending a message from the first controller to the second controller informing the second controller of cache meta data associated with data in the mirror cache line" as required by the claims of Applicants' invention, Skazinski ('709) provides header

information to the system drive when mirroring fails. Skazinski ('709) fails to teach, disclose or suggest all of the elements of the instant application.

Skazinski ('099) also fails to remedy the deficiencies of DeKoning and Skazinski ('709) because Skazinski ('099) fails to teach disclose or suggest at least "sending a message from the first controller to the second controller informing the second controller of cache meta data associated with data in the mirror cache line." Skazinski ('099) focuses on a system and method for maintaining cache coherency and data synchronization in a computer system having multiple active controllers. Skazinski ('099) does not discuss or mention mirroring data anywhere. In addition, Skazinski ('099) does not discuss or mention meta data anywhere. Therefore, Skazinski ('099) does not teach, disclose or suggest the elements of Applicants' claim that are deficient in DeKoning and Skazinski ('709).

Without complete correspondence to the claimed invention, the Section 102 rejections cannot stand and Applicant requests that the rejections be withdrawn. Therefore, Applicant respectfully submits that claims 1, 15, 29 and 30 are patentable over both DeKoning and Skazinski ('709). Because the combination of DeKoning and Skazinski ('099) fails to teach, disclose or suggest all the elements of at least the first claim, the Section 103 rejection improper and should be withdrawn.

Dependent claims 2-14 and 16-28 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 1 and 15. Further dependent claims 2-14 and 16-28 recite additional novel elements and limitations. Applicant reserves the right to argue independently the patentability of these additional novel aspects. Therefore, Applicant respectfully submits that dependent claims 2-14 and 16-28 are patentable over the cited references.

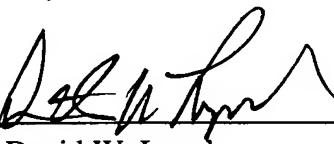
On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

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If a telephone conference would be helpful in resolving any issues concerning this communication, please contact attorney for Applicant, David W. Lynch, at 651-686-6633 Ext. 116.

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